

## **ABSTRACT**

A device is provided that can include at least one gas trap that can be arranged in fluid communication with a sample-containment feature formed in or on the device. The gas trap can be arranged to trap gas or air displaced from the sample-containment feature as the sample-containment feature is loaded with a liquid. The trapped gas in the gas trap can assist in breaking-up and expelling the liquid from the sample-containment feature during a subsequent liquid transfer operation, for example, to an adjacent sample-containment feature. Systems for processing such a device and methods using such a device are also provided.